

#### REMARKS

Claims 1, 14, 15, 19-20, and 25-26 have been cancelled without prejudice to the filing of continuing applications. Claims 2-6, 8-10, 12, 16, 22-23, 28-30, 144 and 146-147 have been amended. New claim 148 has been added. Support for the amendments is found throughout the specification. Specifically, support for new claim 148 can be found in original claim 1. The amendments to claims 2, 3, and 4 is found in original claim 1 and the examples, in particular Example 2. With these amendments, the pending claims are 2-13, 16-18, 21-24, 27-30, and 144-148. No new matter has been added by these amendments.

The claims have been amended only so that they are now directed to the elected invention. The amendments to claims 2-6, 8-10, 12, 16, 22-23, 28-30, 144, and 146-147 and the addition of new claim 148 have not been made to overcome the reference cited by the Patent Office and discussed below.

#### The 35 U.S.C. § 103(a) Rejection

Claims 1-5, 28, 30, and 144-147 stand rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/65870 (Sherrill et al.). Sherrill et al. is directed to sulfonamides and Applicants claims do not encompass such compounds. Neither the final compounds nor the intermediates disclosed in Sherrill et al. suggest the claims originally elected or now pending.

Nevertheless, the Patent Office asserts the compound of Example 54 shown on page 156 of Sherrill et al. falls within claim 1 and that the "the reference compounds [are a] subgenus of the claimed compounds, and are the intermediates for making the final product" (Office Action, page 4). Applicants respectfully disagree.

None of the elected claims encompass the compound of Example 54 shown on page 156 of the reference. That compound contains a "BOC" group, i.e., a carbamic acid t-butyl ester. Carbamic acid esters are not within the scope of original claims 1-30 and 144-147. Furthermore, none of the other intermediate compounds of Sherrill et al. are within or suggest Applicants' originally elected or pending claims. Applicants again note that the amendments and the new claim have not been made to overcome Sherrill et al. but only because of Applicants' election.

Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

#### State of the Art

U.S. Patent No. 4,935,405 has been cited to show the state of the art. The Patent Office directs the reader's attention to "example 11 I, column 17." However, no "example 11 I" appears in the patent. Applicants request clarification for the record.

### Applicants

Applicants note that the applicants are the individuals named in the Declaration, Lawrence Fang and Varghese John. Applicants regret any confusion caused by the clerical error in the response filed April 30, 2002.

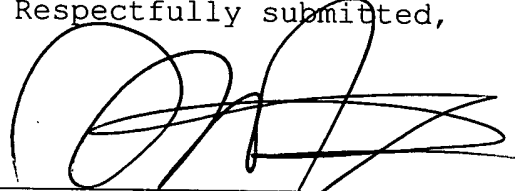
### Information Disclosure Statement

The information disclosure statement filed October 22, 2001, has been deemed to not comply with the provisions of 37 C.F.R. §1.97, §1.98 and MPEP §609. Specifically, the Examiner states that a concise explanation of the relevance of the references is required. Applicants respectfully disagree. There is nothing in 37 CFR §1.97, §1.98 or MPEP §609 stating such a requirement. Indeed, §609 of the MPEP points out that "[t]he requirement for a concise explanation of relevance is limited to information that is not in the English language.] See §609 of the MPEP at subsection III.A(3) (MPEP Eighth Edition, page 600-122). Accordingly, consideration of the information provided with the information disclosure statement filed on October 22, 2001, is respectfully solicited.

**CONCLUSION**

Allowance of the claims and passage of the case to issue are respectfully solicited. Should the Examiner believe a discussion of this matter would be helpful, she is invited to telephone the undersigned at (312) 913-0001.

Respectfully submitted,



Dated: January 30, 2003

By: \_\_\_\_\_

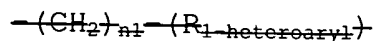
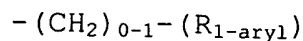
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Marked Up Copy of Amended Claims

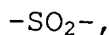
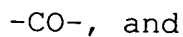
2. (Amended) A substituted amine according to claim 1

where  $R_1$  is:

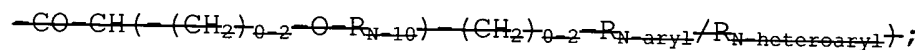
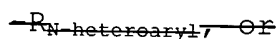
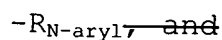


where  $R_N$  is:

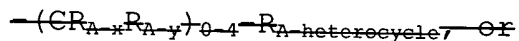
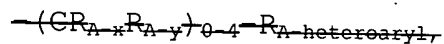
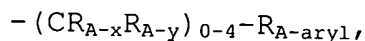
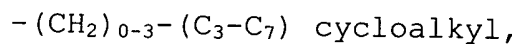
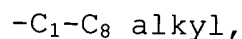
$R_{N-1}\text{-}X_N\text{---}$  where  $X_N$  is selected from the group consisting of:



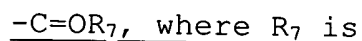
where  $R_{N-1}$  is ~~selected from the group consisting of:~~



where  $R_A$  is:



---cyclopentyl or ---cyclohexyl ring fused to  $R_{A\text{-aryl}}$  ~~or  $R_{A\text{-heteroaryl}}$  or  $R_{A\text{-heterocycle}}$~~ , or



C<sub>1</sub> - C<sub>6</sub> alkyl,  
phenyl,  
thioalkoxyalkyl,  
(aryl)alkyl,  
cycloalkyl,  
cycloalkylalkyl,  
hydroxyalkyl,  
alkoxyalkyl,  
aryloxyalkyl,  
haloalkyl,  
carboxyalkyl,

where X is -N or -O, with the proviso that when X is O, R<sub>B</sub> is absent; and when X is N,

R<sub>B</sub> is:

-C<sub>1</sub>-C<sub>8</sub> alkyl,  
 -(CH<sub>2</sub>)<sub>0-3</sub>-(C<sub>3</sub>-C<sub>7</sub>) cycloalkyl  
 -(CR<sub>A-X</sub>R<sub>A-Y</sub>)<sub>0-4</sub>-R<sub>A</sub>-aryl,  
~~-(CR<sub>A-X</sub>R<sub>A-Y</sub>)<sub>0-4</sub>-R<sub>A</sub>-heteroaryl,~~  
~~-(CR<sub>A-X</sub>R<sub>A-Y</sub>)<sub>0-4</sub>-R<sub>A</sub>-heterocycle,~~  
 -cyclopentyl or cyclohexyl ring fused to R<sub>A</sub>-aryl ~~or R<sub>A</sub>-~~  
~~heteroaryl or R<sub>A</sub>-heterocycle.~~

3. (Amended) A substituted amine according to claim 2  
 where R<sub>1</sub> is:

~~-(CH<sub>2</sub>)-(R<sub>1</sub>-aryl)-or~~

~~-(CH<sub>2</sub>)-(R<sub>1</sub>-heteroaryl);~~

where R<sub>2</sub> is -H;

where R<sub>3</sub> is -H;

where R<sub>N</sub> is:

R<sub>N-1</sub>-X<sub>N</sub>- where X<sub>N</sub> is:

-CO-,

where R<sub>N-1</sub> is ~~selected from the group consisting of:~~

-R<sub>N</sub>-aryl,

~~-R<sub>N</sub>-heteroaryl;~~

where R<sub>A</sub> is:

-C<sub>1</sub>-C<sub>8</sub> alkyl,

-(CH<sub>2</sub>)<sub>0-3</sub>-(C<sub>3</sub>-C<sub>7</sub>) cycloalkyl,

-(CR<sub>A-x</sub>R<sub>A-y</sub>)<sub>0-4</sub>-R<sub>A</sub>-aryl,

~~-(CR<sub>A-x</sub>R<sub>A-y</sub>)<sub>0-4</sub>-R<sub>A</sub>-heteroaryl;~~

~~-(CR<sub>A-x</sub>R<sub>A-y</sub>)<sub>0-4</sub>-R<sub>A</sub>-heterocycle;~~

-cyclopentyl or -cyclohexyl ring fused to R<sub>A</sub>-aryl, or ~~or~~

~~R<sub>A</sub>-heteroaryl or R<sub>A</sub>-heterocycle;~~

-C=OR<sub>7</sub>, where R<sub>7</sub> is

C<sub>1</sub> - C<sub>6</sub> alkyl,

(aryl)alkyl,

cycloalkyl,

cycloalkylalkyl,

hydroxyalkyl,

alkoxyalkyl,

haloalkyl,

where X is -N or -O, with the proviso that when X is O, R<sub>B</sub> is absent;

and when X is N,

R<sub>B</sub> is:

-C<sub>1</sub>-C<sub>8</sub> alkyl,

-(CH<sub>2</sub>)<sub>0-3</sub>-(C<sub>3</sub>-C<sub>7</sub>) cycloalkyl,

-(CR<sub>B-x</sub>R<sub>B-y</sub>)<sub>0-4</sub>-R<sub>B</sub>-aryl,

~~-(CR<sub>B-x</sub>R<sub>B-y</sub>)<sub>0-4</sub>-R<sub>B</sub>-heteroaryl,~~

~~-(CR<sub>B-x</sub>R<sub>B-y</sub>)<sub>0-4</sub>-R<sub>B</sub>-heterocycle,~~

-cyclopentyl or -cyclohexyl ring fused to R<sub>B</sub>-aryl ~~or R<sub>B</sub>-heteroaryl or R<sub>B</sub>-heterocycle.~~

4. (Amended) A substituted amine according to claim 3,

where R<sub>A</sub> is:

-(CR<sub>A-x</sub>R<sub>A-y</sub>)<sub>0-4</sub>-R<sub>A</sub>-aryl,

~~-(CR<sub>A-x</sub>R<sub>A-y</sub>)<sub>0-4</sub>-R<sub>A</sub>-heteroaryl, or~~

-cyclopentyl or -cyclohexyl ring fused to R<sub>A</sub>-aryl ~~or R<sub>A</sub>-heteroaryl or R<sub>A</sub>-heterocycle, or~~

-C=OR<sub>7</sub>, where R<sub>7</sub> is

C<sub>1</sub> - C<sub>6</sub> alkyl,

cycloalkyl,

cycloalkylalkyl

alkoxyalkyl,

haloalkyl,

and

where  $R_B$  is:

$-(CR_{B-x}R_{B-y})_{0-4}-R_{B-aryl},$

~~$-(CR_{B-x}R_{B-y})_{0-4}-R_{B-heteroaryl},$  or~~

$-\text{cyclopentyl}$  or  $-\text{cyclohexyl}$  ring fused to  $R_{B-aryl}$

~~or  $R_{B-heteroaryl}$  or  $R_{B-heterocycle}.$~~

5. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_1$  is

$-(CH_2)-(R_{1-aryl})$  where  $R_{1-aryl}$  is phenyl.

6. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_1$  is

$-(CH_2)-(R_{1-aryl})$  where  $R_{1-aryl}$  is phenyl substituted with two  
 $-F$ .

8. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_2$  is  $-H$ .

9. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_3$  is  $-H$ .

10. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_N$  is

$R_{N-1}-X_N-$  where  $X_N$  is  $-\text{CO}-$ , where  $R_{N-1}$  is  $R_{N\text{-aryl}}$  where  $R_{N\text{-aryl}}$  is  
phenyl substituted with one  $-\text{CO}-\text{NR}_{N-2}\text{R}_{N-3}$  where the substitution on  
phenyl is 1,3-.

12. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_N$  is

$R_{N-1}-X_N-$  where  $X_N$  is  $-\text{CO}-$ , where  $R_{N-1}$  is  $R_{N\text{-aryl}}$  where  $R_{N\text{-aryl}}$  is  
phenyl substituted with one  $\text{C}_1$  alkyl and with one  $-\text{CO}-\text{NR}_{N-2}\text{R}_{N-3}$   
where the substitution on the phenyl is 1,3,5-.

16. (Amended) A substituted amine according to claim  $\pm$  148  
where  $R_A$  is:

$-(\text{CR}_{A-x}\text{R}_{A-y})_{0-4}-\text{R}_{A\text{-aryl}}$  where  $\text{R}_{A\text{-aryl}}$  is phenyl,

~~$-(\text{CR}_{A-x}\text{R}_{A-y})_{0-4}-\text{R}_{A\text{-heteroaryl}}$~~

$-\text{cyclopentyl}$  or  $-\text{cyclohexyl}$  ring fused to a  $\text{R}_{A\text{-aryl}}$  ~~or  $\text{R}_{A\text{-heteroaryl}}$~~   
~~heteroaryl or  $\text{R}_{A\text{-heterocycle}}$ .~~

22. (Amended) A substituted amine according to claim 1  
where  $R_B$  is:

$-(\text{CR}_{B-x}\text{R}_{B-y})_{0-4}-\text{R}_{B\text{-aryl}}$  where  $\text{R}_{B\text{-aryl}}$  is phenyl,

~~$-(\text{CR}_{B-x}\text{R}_{B-y})_{0-4}-\text{R}_{B\text{-heteroaryl}}$~~

-cyclopentyl or -cyclohexyl ring fused to a ~~R<sub>B</sub>-aryl or R<sub>B</sub>-heteroaryl or R<sub>B</sub>-heterocycle.~~

28. (Amended) A substituted amine according to claim ~~±~~ 148, where R<sub>B</sub> is absent.

29. (Amended) A substituted amine according to claim ~~±~~ 148 chosen from the group consisting of:

N-[1-(3,5-Difluoro-benzyl)-2-hydroxy-3-(N'-methyl-N'-phenyl-hydrazino)-propyl]-5-methyl-N',N'-dipropyl-isophthalamide,

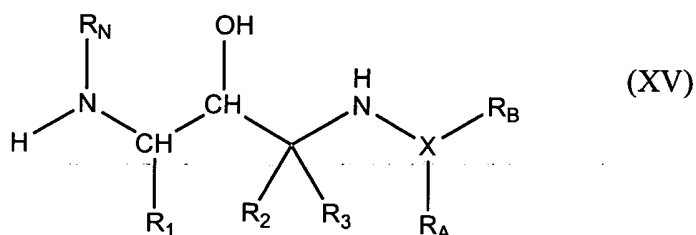
N-{1-(3,5-Difluoro-benzyl)-2-hydroxy-3-[N'-methyl-N'-(4-methyl-pentanoyl)-hydrazino]-propyl}-5-methyl-N',N'-dipropyl-isophthalamide, and

N-[1-(3,5-Difluoro-benzyl)-2-hydroxy-3-phenoxyamino-propyl]-5-methyl-N',N'-dipropyl-isophthalamide.

30. (Amended) A substituted amine according to claim ~~±~~ 148 where the pharmaceutically acceptable salt is selected from the group consisting of salts of the following acids acetic, aspartic, benzenesulfonic, benzoic, bicarbonic, bisulfuric, bitartaric, butyric, calcium edetate, camsylic, carbonic, chlorobenzoic, citric, edetic, edisylic, estolic, esyl, esylic, formic, fumaric, gluceptic, gluconic, glutamic,

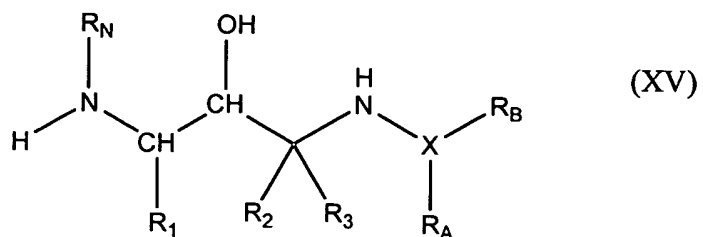
glycollylarsanilic, hexamic, hexylresorcinoic, hydrabamic, hydrobromic, hydrochloric, hydroiodic, hydroxynaphthoic, isethionic, lactic, lactobionic, maleic, malic, malonic, mandelic, methanesulfonic, methylnitric, methylsulfuric, mucic, muconic, napsylic, nitric, oxalic, p-nitromethanesulfonic, pamoic, pantothenic, phosphoric, monohydrogen phosphoric, dihydrogen phosphoric, phthalic, polygalactouronic, propionic, salicylic, stearic, succinic, sulfamic, sulfanilic, sulfonic, sulfuric, tannic, tartaric, teoclic and toluenesulfonic.

144. (Amended) A composition comprising a compound of formula XV



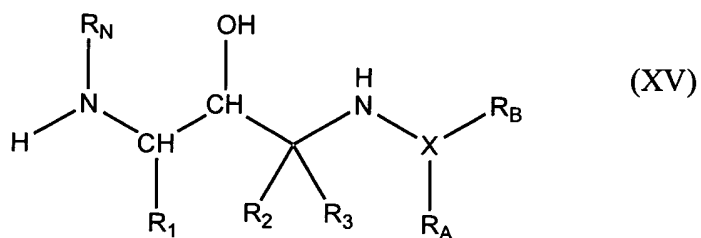
where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_N$ ,  $R_A$ ,  $R_B$ , and X are as defined in claim 148; and an inert diluent or edible carrier.

146. (Amended) A composition comprising a compound of formula XV



where  $\text{R}_1$ ,  $\text{R}_2$ ,  $\text{R}_3$ ,  $\text{R}_N$ ,  $\text{R}_A$ ,  $\text{R}_B$ , and  $\text{X}$  are as defined in claim  $\pm$  148; and an binder, excipient, disintegrating agent, lubricant, or gildant.

147. (Amended) A composition comprising a compound of formula XV



where  $\text{R}_1$ ,  $\text{R}_2$ ,  $\text{R}_3$ ,  $\text{R}_N$ ,  $\text{R}_A$ ,  $\text{R}_B$ , and  $\text{X}$  are as defined in claim  $\pm$  148, disposed in a cream, ointment, or patch.